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Social Disparities in Health Behaviours:
The Role of Class-Related Behavioural Norms and Social Class Identification

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The data that support our findings are openly available in OSF at https://osf.io/veygu/.
Abstract

Inequalities in health behaviours (i.e., the tendency of socially disadvantaged people, compared to more advantaged people, to engage in fewer healthy behaviours) have been mostly accounted for by individual and environmental factors. The present research proposed to consider a social identity perspective by examining the combined impact of class-related norms and social class identification on intentions to engage in healthy behaviours. Based on a correlational study (N = 407), our results showed that healthy behaviours were perceived to be more normative of the upper-middle class than the lower-middle class, regardless of participants’ class membership. We also found that intentions to perform healthy behaviours increased among those who highly identified with the upper-middle class, when they perceived healthy behaviours as highly normative of that class. Moreover, those who highly identified with the lower-middle class (vs. the upper-middle class) reported lower intentions when healthy behaviours were viewed as normative of the upper-middle class. This suggests that stronger prevalence of healthy behaviours among socially privileged people is driven by in-group conformity, whereas the tendency to act less healthily among those disadvantaged would be underpinned by out-group rejection. More generally, these findings underscore the importance of social identity factors in providing novel insights for research on health disparities.

Key-words:

Social inequalities; healthy behaviours; social identity; class-related norm; class identification
Despite a downward trend over recent decades, health inequalities still remain widespread worldwide. People with relatively high socio-economic resources develop fewer physical and mental diseases (e.g., Singh & Jemal, 2017; Teng et al., 2017) and live longer (e.g., Bosworth, 2018) than people with scarcer socio-economic resources. One of the main reported causes for this social gradient in health is situated in people’s behaviours and in particular in the fewer healthy behaviours that those in lower socioeconomic positions engage in (Petrovic et al., 2018). Indeed, it has been extensively shown that engagement in healthy behaviours gradually decreases as one moves down in the socio-economic hierarchy. For example, people with the lowest educational level are among the largest consumers of high-fat and junk food (e.g., Miura & Turrell, 2014) and are more reluctant to eat fruit and vegetables (e.g., Lallukka et al., 2007).

Over the last thirty years, a considerable amount of research has been carried out to identify the determinants of such disparities (see e.g. Braveman & Gottlieb, 2014). Two research perspectives have notably emerged: the individual-level perspective and the environment-level perspective (Stephens et al., 2012). The former rests on the notion that health inequalities are the result of individual characteristics, abilities, traits, or preferences. It is assumed that people with lower and higher socio-economic status (SES) possess unequal individual capacities, for example in terms of self-regulation, self-efficacy, or decision-making. In turn, these differences influence individuals’ propensity to adopt healthy behaviours (e.g., Gallo et al., 2009). For example, Bickel et al. (2014) demonstrated that maintenance of unhealthy behaviours (e.g., smoking or drinking) and development of health
problems (e.g., obesity) in low-SES people are related to poor executive function abilities (e.g., visuospatial skills, working memory).

From a different angle, the environment-level perspective suggests that the primary source of health inequalities is in the environments of low and high-SES people. This perspective emphasizes the role of material resources (e.g., money) and environmental conditions (e.g., health facilities) in accounting for why healthy behaviours are differentially adopted across the social ladder. For example, Hoffimann et al. (2017) have shown that accessibility to green spaces was lower in the most socio-economically deprived neighbourhood of the city of Porto, which then had direct implications on the residents’ levels of physical activity. Put differently, the individual-level perspective situates the causes of health gap in individuals, suggesting that the tendency to adopt fewer healthy behaviours among people with low SES would be attributable to their own responsibility, whereas the environment-level perspective tends to highlight the role of socio-economic structure and public authorities in reducing inequalities (Factor et al., 2011; Stephens et al., 2012).

Both perspectives have provided important insights into our understanding of the causes of the health gap and have greatly contributed to developing effective interventions aimed at narrowing it. Nevertheless, by investigating individual or environmental characteristics independently, such research efforts have failed to consider the factors located at the intersection between the individual and the environment and thus do not fully capture the antecedents of health disparities. To address this neglect, we propose to apply a framework that can serve as a bridge between both perspectives and whose focus is placed on group-based factors and social identity processes. Drawing upon the social-identity approach (Reicher et al., 2010), we focus here on examining people’s social identities related to two intermediate class groups: the upper-middle class and the lower-middle class. Although stratification of social classes still remains a controversial issue, we chose this pragmatic
approach because it avoids a middle-class category into which people typically tend to all place themselves (Kelley & Evans, 1995), avoids any stigma associated with lower or working-class labels, and has been successfully used in previous research (Becker et al., 2015; see the Method section for more information).

More specifically, we aimed to investigate the idea that healthy behaviours are perceived as the behavioural norms of the upper-middle classes. For this reason, they are likely to be promoted by members of those who strongly identify with those classes, but actively avoided by members of those who strongly identify with the lower-middle classes. Accordingly, we contend that the adoption of healthy behaviours would not only depend on individual capacities or environmental affordances, but also on the meaning of healthy behaviours to class identity and the subjective importance that individuals attach to their social class. To test these notions, we conducted a correlational study that examined the combined impact of how individuals perceived that healthy behaviours are normative of the upper-middle class and the degree of identification with class on intentions to perform healthy behaviours.

A Social Identity Approach of Health Behaviour

The social identity approach, comprising social identity theory (Tajfel & Turner, 1979) and self-categorisation theory (Turner et al., 1987), is deeply rooted on the premise that individuals essentially live within social groups and define who they are through the groups they are members of. Central to this approach is that identification with a group (i.e., the extent to which group identity is meaningful for self-definition) motivates individuals to conform to the norms of an in-group (Haslam et al., 1992; Oakes et al., 1994) and to distance from the norms of a relevant out-group (Hogg et al., 1990; Turner, 1991). Social norms are implicit rules and standards that members of a group internalise throughout socialisation and that specify what is the socially accepted line of conduct established within the group.
(Cialdini & Trost, 1998). Thus, when individuals identify strongly with their membership groups, they seek to bring their attitudes and behaviours into line with the in-group norms and to avoid adopting the behavioural norms of groups they do not belong to. They mainly do so in order to maintain a sense of in-group identity and to display and affirm their in-group membership. As a consequence, involvement in a given behaviour does not only result from individual decisions or environmental characteristics but may also derive from the normative orientation of groups one identifies with.

Recently, the social identity approach has been applied to health issues (e.g., Jetten et al., 2012, 2017). It has notably been shown that health behaviours are socially meaningful behaviours that may reflect the norms of groups to which individuals attach a great importance (e.g., Livingstone et al., 2011; Smith et al., 2017; Tarrant & Butler, 2011). If individuals define themselves through a group whose norms encourage healthy behaviours, they will be more likely to behave in line with such norms and thus to devote efforts to behave in healthy ways. In contrast, if a social identity involves norms that approve of health-risk behaviours, then the willingness to undertake unhealthy actions will increase among those who strongly identify with the group (e.g., Banas et al., 2016; Louis et al., 2007). Consistent with this, Terry and Hogg (1996) have shown that intentions to perform health-protective behaviours (e.g., exercising regularly) are higher when such behaviours are perceived to be the norms of a relevant reference group with which people highly identified.

In addition, research has highlighted that people may endorse negative attitudes toward certain behaviours, and may actively avoid performing them, if they are perceived to embody out-group norms (see Hogg et al., 1990; Pryor et al., 2019). In the context of health behaviours, Berger and Rand (2008) have demonstrated that students displayed less engagement in unhealthy behaviours (i.e., alcohol use) when they were made to believe that such behaviours were normative for undesirable outgroups. Unhealthy behaviours are actively
avoided to the extent that they symbolise health-related norms that are endorsed by an out-group that one does not want to be classified into. Related, other works have demonstrated that individuals tend to judge more negatively and to abandon cultural tastes or preferences, such as eating preferences, as soon as they are viewed as common within dissociative reference out-groups (e.g., Berger & Heath, 2008; White & Dahl, 2007).

In sum, the social identity approach suggests that, regardless of whether a given behaviour is healthy or not, it is 1) the extent to which people perceive this behaviour as normative of the in-group or the out-group, combined with 2) the level of subjective identification with the in-group that determine whether an individual will engage in this behaviour or not. The purpose of the present research is to examine the role of such an approach in the context of health inequalities.

**Social Class, Social Identity, and Health Behaviour**

Social classes are social groups whose members have similar socio-economic positions (notably in terms of income or educational attainment), but who also share common cultural tastes, values, beliefs, and, of importance for the present study, behavioural norms (Kraus et al., 2019; Stephens et al., 2007). Although social classes may be viewed as being not clearly visible and delineated in society (Thomas & Azmitia, 2014), individuals readily reflect on themselves in terms of class membership when they are asked to think about their identity. Social classes confer individuals with a social identity on which they may give a strong subjective importance in their self-definition (Destin et al., 2017; Manstead, 2018). In this vein, Easterbrook et al. (2020) have found that when considering their self-concept, individuals place as much importance on their class-related identities as they give to commonly studied identities, like gender or ethnicity. As a consequence, we believe that the social identity approach, with its focus on group identity and norms as key predictors of
individuals’ attitudes and behaviours, can adequately address issues relating to social classes and can offer a solid and innovative theoretical framework to account for health inequalities.

A first attempt to empirically develop a social identity perspective of health inequalities may be found in research by Oyserman and colleagues (2007). In a series of seven studies, the authors have shown that people with lower socio-economic background (e.g., ethnic minorities in the US) perceived healthy behaviours as defining components of the identity of White, middle-class Americans. Moreover, when they self-categorised through their SES, people from disadvantaged classes were found to display more fatalistic thoughts toward health and reduced accessibility to health knowledge. Drawing on the identity-based motivation model, Oyserman et al. (2007) argued that low-SES people act in ways to reject behaviours that are not congruent with their social identity. In other words, they express more resistance to acting healthily because this does not represent a central feature of their identity. However, despite its novelty in accounting for health disparities through identity factors, Oyserman et al.’s research did not consider the key roles of perceived norm and social identification, such as theorized by the social identity approach. In addition, only lower-class people were under investigation and no measures of behaviours or behavioural intentions were included.

The present research aimed to address these limitations. First, we contended that healthy behaviours are likely to be perceived as the behavioural norms of the upper-middle class. Second, we argued that both the perception of class-related norms and social class identification can account, at least in part, for disparities in health behaviours. Consistent with social identity approach, we expected that the more members of the upper-middle class consider healthy behaviours as normative of their class, the more those who strongly identify with their class will be particularly inclined to engage in healthy behaviours. In contrast, the more members of the lower-middle class perceive healthy behaviours to be normative of the
upper-middle class (i.e., the norms of the out-group), the less they will be likely to express a desire to perform healthy behaviours, especially when they strongly identify with their class. This would suggest that the higher prevalence of healthy behaviours among people in high socio-economic positions can be accounted for by increased conformity to the norms of their class and a willingness to display their class membership. In contrast, among socially disadvantaged people, a reduced engagement in healthy behaviours, which do not fit with their class norms, would be driven by a desire not to be classified as an out-group member and to differentiate from the out-group. As a result, we argue that social disparities in health behaviours would result from variations in the normative content of class identities and the degree to which class membership matters for individuals’ sense of their self.

In this sense, the present approach is at the interface between the individual-level and environment-level perspectives. Health inequalities are considered as resulting from how people’s social environment (and notably important group memberships) apprehend health issues and how individuals incorporate this environment as part of their personal selves. In other words, social environments establish and promote health-related attitudes and practices that shape individuals’ social identities, which, in turn, determine the way they will behave. This way, social identities and their content (i.e., social norms) are key intermediaries in the relationship between the individual behaviour and social environments.

The Present Research

We conducted a correlational study whose goal was to investigate the interaction between the perception of class-related behavioural norms (i.e., perceiving healthy behaviours as normative of the upper-middle class) and class identification on intentions to perform healthy behaviours. We tested the hypotheses that healthy behaviours are viewed as the norms of the upper-middle class (more than the lower-middle class), and that this perception should increase intentions to perform healthy behaviours among members of the upper-middle class
who strongly (vs. weakly) identify with their class. In contrast, the perception that healthy behaviours are normative of the upper-middle class should negatively predict intentions to perform healthy behaviours among members of the lower-middle class who strongly (vs. weakly) identify with their class.

Method

Participants and Procedure.

Of the 602 people who voluntarily participated in this study, responses of 195 were excluded because they did not complete the questions relating to all the main variables ($n=161$), did not provide consent to use their answers ($n=21$), or completed the study in an unreasonable time ($n=13$). The final sample thus consisted of 407 participants. There were 269 women and 138 men, 341 Swiss and 58 French people (the remaining reported being from other European countries). Mean age was 29.45 years ($SD=10.96$; from 18 to 75 years).

The study used an online questionnaire. Participants were recruited through various social networking websites (e.g., Facebook). After participants agreed to take part, they were asked to report their intention to engage in healthy behaviours. We then measured participants’ class membership, class identification, norm perception, and other additional variables, prior to debriefing and thanking them for participation.

Measures

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1 Given that we conducted our study online using social networking websites, a large number of people started completing the questionnaire but quit quickly (on average, the excluded participants completed less than 35% of the study). If a participant’s response is missing on one of the measures in the model, they were excluded. However, if a participant just omitted one item of a scale, the mean score for the participant was calculated based on the given responses to the remaining items on the scale.

2 We removed participants who answered in less than 300 seconds because our initial estimations indicated that reading and filling the questionnaire required a minimum of 5 minutes. We also excluded those who took more than one hour to complete it, as indicating that they performed other tasks while participating.

3 To check how our measure of class membership relates to other measures of SES, we also assessed objective and subjective SES. Objective SES consisted of measures of educational attainment, including three categories (i.e., people with high school degree or less, college degree, postgraduate degree or more) and annual income, including seven categories (i.e., less than 10,000€ a year, between 10,000 and 20,000€, …, between 50,000 and 60,000€, and 60,000€ or more). A composite score of objective SES was calculated by standardizing and averaging educational attainment and income (see Piff et al., 2010). Subjective SES was assessed by asking people to indicate, on a ladder with 10 rungs representing people with low SES at the bottom and people with high SES at the top, the rung they think they stand, relative to others in their community ($M=5.35$, $SD=1.64$).
**Behavioural Intention**

We measured intention to perform healthy behaviours by asking participants to rate how often they intended to perform several kinds of health behaviours in the next seven days. Building on Oyserman et al. (2007), 13 behaviours were assessed, such as “exercise vigorously in your spare time” or “eat foods like pizzas, hamburgers, snacks” (reverse-coded). Answers were given on a scale ranging from 1 (never) to 7 (very regularly). We computed a unique score of intention by averaging responses to all the items ($\alpha = .66; M = 4.70, SD = 0.74$).

**Class Membership**

Class membership was measured by asking participants to indicate which of the two following social classes they felt they belonged to: “the low-middle class” or “the high-middle class”. Class division, as well class labels, were introduced to participants by asking them to read a short description.

**Class Identification**

Based on participants’ class membership, we assessed class identification through the same five items for each target group (e.g., “*I identify with people of the high- (or low-)* middle class”, “*I feel close to people of the high- (or low-)* middle class”). This measure was following our variables of interest, we additionally collected other measures for exploratory purposes: class similarity, legitimacy and stability of intergroup differences, intergroup permeability, and perceived mobility. However, for the sake of conciseness and clarity, we did not report details about these variables here but as supplementary materials.

4 To facilitate self-categorisation into one of two social classes, we opted for “low-middle class” versus “high-middle class” (for a similar use of such labels, see Becker et al., 2015), because “lower-middle classes” versus “upper-middle classes” might have been perceived somewhat stigmatizing and quite difficult to categorise into. Note that this measure of class membership proved to be satisfactory in terms of how well-balanced the distribution was, as 179 participants classified themselves as members of the low-middle class and 228 as members of the high-middle class. Moreover, we found significant differences between both classes in terms of objective SES, $t(405) = 13.46, p < .001$. Participants who categorized into the low-middle class had a lower score of objective SES ($M = -0.51, SD = 0.70$) than those who categorized into the high-middle class ($M = 0.40, SD = 0.66$).

5 This description was as follows: “*Nowadays, the population of contemporary societies is divided into two social classes: the high-middle class and the low-middle class. The high-middle class comprises people with relatively high socioeconomic resources. They possess, for example, quite high qualifications, high incomes, or jobs with responsibilities. The low-middle class comprises people with relatively low socioeconomic resources. They possess, for example, low qualifications, low incomes, or jobs with few responsibilities.*”
adapted from Doojse et al. (1995). Cronbach’s alpha is $\alpha = .83$ for participants who categorised into the high-middle class ($M = 3.82, SD = 1.16$) and $\alpha = .76$ for those who categorised into the low-middle class ($M = 4.01, SD = 1.26$). Participants answered on scales ranging from 1 (= not at all) to 7 (= yes absolutely).

**Norm Perception**

Perception that healthy behaviours are the upper classes’ norms was measured by using three items ($\alpha = .72; M = 5.08, SD = 0.99$), adapted from the theory of planned behavior (TPB; Fishbein & Ajzen, 2010). After instructing participants to “think about behaviours like eating fruit and vegetables, exercise regularly, try not to drink too much, or not to smoke”, they were requested to give their opinion about 1) whether “people of the high-middle class would agree with the idea that performing these kinds of behaviours is a good thing to do?” (from 1 = not at all to 7 = yes absolutely), 2) “how many people of the high-middle class would think that performing these kinds of behaviours is a good thing to do?” (from 1 = no one to 7 = everyone), and 3) “how many people of the high-middle class would perform these kinds of behaviours?” (from 1 = no one to 7 = everyone).

Additionally, to evaluate whether people hold the belief whereby healthy behaviours are more normative of the upper class than the lower class, we included the same three questions but asking participants to judge for people of the low-middle class instead ($\alpha = .66$).

**Results**

**Preliminary Analyses**

Table 1 displays the descriptive statistics and bivariate correlations for all the variables. It is worthwhile noting that the measure of class membership strongly correlated with both objective, $r(407) = .56, p < .001$, and subjective SES, $r(403) = .56, p < .001$. Consistent with the literature, results also revealed that members of the high-middle class reported stronger intentions to perform healthy behaviours ($M = 4.81, SD = 0.71$), relative to
people of the low-middle class \((M = 4.56, SD = 0.76), t = -3.29, p = .001, 95\% \text{ CI} [-0.386, -0.097]\). Furthermore, we found that the level of class identification did not differ between members of the low-middle and high-middle classes, \(t = 1.58, p = .115, 95\% \text{ CI} [-0.046, 0.427]\).

**Main Analyses**

First, we found that healthy behaviours were perceived to be more normative of the high-middle class people \((M = 5.08, SD = 0.99)\) than they were of the low-middle class people \((M = 4.71, SD = 0.99)\), \(F(1, 405) = 55.29, p < .001, \eta^2_p = .12\). In addition, our results revealed that this difference did not vary across participants’ class membership, \(F(1, 405) = 0.80, p = 373, \eta^2_p = .002\). This suggests that there is a shared belief across social classes that engagement in healthy behaviours corresponds to the normative orientation of the upper class.

Second, we performed a hierarchical linear regression analysis to test our main hypothesis. At Step 1, we entered main effects of class identification and norm perception as standardized continuous variables, and class membership as a categorical variable. In addition to the main effects, Step 2 included the two-way interactions between all variables, and Step 3 included the predicted three-way interaction. As shown in Table 2, there was a main effect of class membership, \(B = 0.11, SE = 0.04, t = 2.99, p = .003, 95\% \text{ CI} [0.038, 0.182]\), such that members of the high-middle class reported stronger intentions to perform healthy behaviours than did members of the low-middle class. We also found a Class identification \(\times\) Norm perception interaction, \(B = 0.08, SE = 0.04, t = 2.39, p = .017, 95\% \text{ CI} [0.015, 0.153]\). Moreover, the overall Class membership \(\times\) Class identification \(\times\) Norm perception interaction was significant, \(B = 0.08, SE = 0.04, t = 2.35, p = .019, 95\% \text{ CI} [0.013, 0.151]\). To interpret this interaction, we performed simple slope analyses for low-middle and higher-middle class people separately at 1 SD above and below the mean score of class identification. Among participants of the high-middle class, results showed that intentions to perform healthy
behaviours was positively predicted by norm perception when class identification was high, $B = 0.15$, $t = 2.02$, $p = .044$, 95% CI [0.004, 0.291], but was negatively predicted by norm perception when class identification was low, $B = -0.19$, $t = -2.50$, $p = .013$, 95% CI [-0.330, -0.040]. Also, identification was found to positively predict intention when norm perception was high, $B = 0.19$, $t = 2.68$, $p = .008$, 95% CI [0.050, 0.324], but was found to negatively predict intention when norm perception was low, $B = -0.15$, $t = -1.98$, $p = .049$, 95% CI [-0.290, -0.001]. Among participants of the low-middle class, results revealed no effects of norm perception, whether identification was low, $B = 0.02$, $t = 0.21$, $p = .836$, 95% CI [-0.135, 0.167], or high, $B = 0.02$, $t = 0.30$, $p = .766$, 95% CI [-0.106, 0.144]. However, we found that among people who perceived healthy behaviours to be normative of the high-middle class, low-middle class people highly identifying with their class had lower intentions to perform healthy behaviours than high-middle class people highly identifying with their class, $B = 0.22$, $t = 3.19$, $p = .002$, 95% CI [0.084, 0.353]. No differences appeared between lowly identified people of the high-middle class and lowly identified people of the low-middle class, $B = -0.03$, $t = -0.44$, $p = .657$, 95% CI [-0.186, 0.118]. The overall interaction is plotted in Figure 1.

**Discussion**

The present data provided support for our hypotheses. First, we found that healthy behaviours were consensually perceived to be more normative of the high-middle class than the low-middle class. Moreover, our results showed that the perception whereby healthy behaviours are normative of the high-middle class positively predicted intentions to engage in healthy behaviours among members of the high-middle class who highly identified with their class. Norm perception and class identification did not predict intentions among members of the low-middle class. However, consistent with the expectations, results revealed that, among participants who viewed healthy behaviours as normative of the high-middle class, those who
strongly identified with the low-middle classes reported lower intentions to act in healthy ways than those who strongly identified with the high-middle class.

These findings bear important contributions to our understanding of psychological determinants and processes that underlie health inequalities. First, this demonstrates that there is a shared belief that healthy behaviours are the norms of the upper-middle class. These behaviours define what is socially desirable and promoted among members of that class. This also indicates that healthy or unhealthy behaviours are not only considered for their physical consequences on individuals’ health, but also for their significance within a broader socio-cultural context and how they are symbolically associated with class identities. This way, healthy behaviours may be considered as class-related identity markers, that is, observable signals in society through which individuals display their class membership (by enacting them or not) and infer others’ socio-economic standing (see Becker et al., 2017; Kraus et al., 2017).

A second contribution of our findings is to have given empirical support to the notion that the disparities in health behaviours between high- and low-SES people may derive, at least in part, from social identity factors. As a function of their SES, individuals may want to engage more or less strongly in healthy behaviours, not only because of their individual capacities or because of their environments, but also because of class identities and their normative orientation toward health. Accordingly, it is not surprising that members of the upper-middle class for whom their class is central to the self-concept were found to be more inclined to adopt a healthier lifestyle, especially when they perceived that healthy behaviours are central attributes of their class identity. In doing so, they sought to display their class membership by conforming to its health-related norms.

Regarding members of the lower-middle class, our findings gave only partially support for our predictions. Although we found that, among those perceiving healthy behaviours as normative of the upper-middle class, people identifying with the lower-middle class had lower
intentions to perform healthy behaviours than people identifying with the upper-middle class, class identification and norm perception were not related to intentions of members of the lower-middle class (when analysed independently of members of the upper-middle class). Several explanations can be raised for this. First, we might think that socially disadvantaged people would engage in fewer healthy behaviours, not because they perceive them as normative of the out-group, but because they would have fewer opportunities to do so (e.g., little access to green spaces). In line with the environment-level perspective, one could argue that not adopting healthy behaviours would not be a sign of rejection of out-group norms but the result of environmental realities (e.g., economic constraints). Perhaps a social-identity framework would not be the most appropriate to account for reduced engagement of low-SES people in healthy behaviours. Future research should address this alternative explanation and clearly disentangle socio-identity mechanisms from environmental characteristics.

Second, whereas we anticipated that the norms of the upper-middle class would affect intentions of the lower-middle class members, there is research showing that out-group norms are less influential than in-group norms because normative influence processes operate more with the groups that one belongs to and identifies with (Jetten et al., 1996; Smith & Louis, 2008). As a result, it is plausible that the intentions of lower-middle class members may not have been influenced by the perception of upper-middle class norms as being the norms of the out-group. Third, it is important to take into consideration that the lower-middle and upper-middle classes do not oppose each other only in terms of in- and out-group. They are two hierarchical social groups with distinct values in society. The upper-middle class is a privileged and high-status social category, which furnishes its members with a positive social identity from which they may derive increased self-esteem (Tajfel & Turner, 1979). Conversely, the lower-middle class is a relatively disadvantaged and low-status group suffering from a negative and threatening social image for self-esteem that members have to
deal with. Thus, because they cannot derive an advantageous status and a positive identity from their class, members of the lower-middle class may seek to distance themselves from their class identity and give it less importance for their self-definition than members of the upper-middle class (Easterbrook et al., 2020). This may explain why they would be less motivated to conform to the norms of their own class and simultaneously reject the norms of the other class. Therefore, further research is needed to refine our understanding about social-identity processes underlying the lower engagement in healthy behaviours among people of low SES.

Moreover, our findings offer important contributions to health behaviour models, and notably the TPB. First, by emphasizing the pivotal roles of group identification and norms in accounting for behavioural intentions, the current research provides empirical support to the literature showing that the predictive capacity of the TPB can be improved by the integration of social identity constructs (e.g., Johnston & White, 2003; Terry & Hogg, 1996). Second, it crucially adds to research by considering the influence of the intergroup context in predicting health behaviour (see Fielding et al., 2008). Notably, we have given evidence to the idea that the decisions to perform health behaviours do not only derive from conformity with in-group standards but also from rejection of the norms of relevant out-groups. Insofar as health behaviours may be embedded in intergroup relations and divisions, perceptions of the intergroup context are predictors as important as the basic TPB components are.

Limitations

Beyond the need to conduct new studies and test whether our findings may be replicated, the present research suffers from the limits of correlational designs. We cannot draw conclusions on causal relationships between the measured variables. To address this issue, future studies might use an experimental approach by manipulating, for example, the level of class identification or the salience of class norms. Furthermore, it is important to note that our
three-way interaction model, although significant, explained less than 6% of variance in behavioural intentions, which is relatively small. This leads us to consider our findings with caution, especially with respect to their implications for understanding and addressing health inequalities. Future research should be conducted to identify additional socio-identity predictors that would increase the proportion of variance explained.

Another limitation is that our study did not reflect the conceptual difference between descriptive norms (i.e., perception of what most group members usually do) and injunctive norms (i.e., perception of what most group members approve or disapprove of). However, research has extensively shown that social norms can work in different ways as a function of how descriptive and injunctive norms interact (e.g., Cialdini et al., 1990). Injunctive norms have been shown to exert influence on behaviour only when combined with high descriptive norms (Bodimeade et al., 2014; Smith & Louis, 2008). Furthermore, people may respond differently to injunctive or descriptive norms depending on whether they originate from an in-group or out-group. For example, Smith and Louis (2008; Study 2) showed that injunctive and descriptive norms affected attitude and behaviour only when they pertained to an in-group source, and not an out-group source. As a result, we can speculate that descriptive norms would be more determinant than injunctive norms in intentions to perform healthy behaviours among people who identify with the upper-middle class. Among those identifying with the lower-middle class, we might hypothesize that intentions would not be altered by the type of norms. Future research should however be conducted to address this important issue and test these predictions.

Conclusion

The present study contributed to showing the relevance of the social identity approach in redefining our understanding of health inequalities. Unlike the individual-level and environment-level perspectives which postulate that health inequalities are determined by
forces situated in individuals’ capacities or in their environment, we illuminated the idea that health inequalities may result from internal, voluntary, and group identity-related motivations, such as actively relaying the normative preferences of one’s social class. Thus, the social identity approach has strong potential to provide novel and alternative ways to account for health inequalities and would deserve to be further examined in future research.

References


and descriptive norms for sun protection in relation to the theory of planned behavior. 

*Journal of Applied Social Psychology, 44*(11), 739–750. 

https://doi.org/10.1111/jasp.12264


https://doi.org/10.1177/00333549141291S206


https://doi.org/10.1016/j.socscimed.2011.07.025


https://doi.org/10.1177/1745691616664424


Lallukka, T., Laaksonen, M., Rahkonen, O., Roos, E., & Lahelma, E. (2007). Multiple socio-


Austin & S. Worchel (Eds.), *The social psychology of inter-group relations* (pp. 33–47). Brooks/Cole.


Figure 1. Intention to perform healthy behaviours as a function of class membership, class identification, and norm perception.
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<td>3. Class membership</td>
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<td>5. Norm perception</td>
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<td>.05</td>
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<td>.08†</td>
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<td>6. Behavioural intention</td>
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<td>.19***</td>
<td>.16**</td>
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*Note.* †p < .10, *p* < .05, **p* < .01, ***p* < .001
Table 2. Hierarchical linear regressions predicting intention to perform healthy behaviours

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*Note. \(^* p < .10, \,*p < .05, **p < .01\)*